

# Plant Energy Profiler Questions Checklist

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Below is a list of all of the information that you will need to complete ePEP.

## **Step 1**

In this section, you will enter general information about your plant or facility. General information includes case name, plant name, state/region, county, industry, contact name, and contact email.

<b>Case Name</b>	Fill in the blank
<b>Plant Name</b>	Fill in the blank
<b>State/Region</b>	Select from the list
<b>County</b>	Select from the list
<b>Industry</b>	Select from list: Aluminum and Alumina; Cement; Chemicals and Allied Products; Computers, Electronics and Appliances; Fabricated Metal Products; Food, Beverage & Tobacco Products; Foundries; Glass and Glass Products; Heavy Machinery; Integrated Steel; Other; Petroleum Refining; Plastic and Rubber Products; Textiles, Apparels and Leather Goods; Transportation Equipment; Wood Products, Pulp and Paper
<b>Contact Name</b>	Fill in the blank
<b>Contact Email</b>	Fill in the blank

## **Step 2**

### **Energy Use Systems**

In this step, please select the major energy use systems in your plant. ePEP will provide a list for you with definitions.

Select all of the energy use systems that consume energy in your plant. The energy use systems include:

- Combined heat and power (cogeneration)
- Compressed air
- Electrochemical processes
- Fans and blowers
- Industrial facilities
- Materials handling
- Materials processing
- Process cooling and refrigeration
- Process heating
- Pumps
- Steam generation equipment

## **Step 3**

### **Production Information**

(Note: Questions in this section are not required to be answered.)

The scorecards shown on Step 3 depend on the end uses selected in Step 2. ePEP has scorecards for the following practices/end uses:

- General energy management (max questions = 5)
- Combined heat and power (max questions = 29)
- Compressed air (max questions = 26)
- Process cooling and refrigeration (max questions = 47)
- Process heating (max questions = 13)
- Pumps (max questions = max questions = 18)
- Steam generation equipment (max questions = 32)

Each scorecard has five to forty seven questions. The questions are not listed in this document since this step is optional; however, your answers to the questions affect the potential end use savings and recommendations shown in the results.

#### **Step 4**

##### **Production Information**

(Note: Questions in this section are not required to be answered.)

In this step, enter the production information for your plant. The production information entered does not affect the potential energy savings calculated in Step 8. The production information is used to calculate energy intensity and energy savings per unit of production. Information collected in this step includes:

<b>Production Line Name</b>	Fill in the blank
<b>Product Name</b>	Fill in the blank
<b>Average Quantity</b>	Fill in the blank (numbers only)
<b>Units</b>	Fill in the blank
<b>Period</b>	Select from list: Annual, Quarterly, Monthly
<b>Percent Consumption*</b>	Fill in the blank (numbers only)

\* Percent Consumption is the approximate percent of your total energy consumption that is used to make this product.

#### **Step 5**

##### **Supplied Energy**

(Note: Questions in this section are not required to be answered.)

Step 5 collects the data from your utility bills and/or meter recordings. Entering this data is optional, but doing so will help ePEP to more accurately profile your facility. For each energy stream in your plant, ePEP collects the following information:

<b>Meter ID</b>	Fill in the blank
<b>Energy Type</b>	Select from list: Electricity, Fuel, Steam
<b>Use per period</b>	Fill in the blank (numbers only)
<b>Unit</b>	Select from list: (depends on energy type)
<b>Period</b>	Select from list: Annual, Quarterly, Monthly
<b>Cost per period</b>	Fill in the blank (numbers only)
<b>Source energy factor</b>	Fill in the blank (numbers only, a default value is provided)
<b>Fuel Type (fuel only)</b>	Select from list
<b>Heating Value (fuel only)</b>	Fill in the blank (numbers only, a default value is provided)
<b>Heating Value Unit (fuel only)</b>	Select from list: Btu/lb, Btu/gal, Btu/SCF
<b>Temperature (steam only)</b>	Fill in the blank (numbers only)
<b>Temperature Unit (steam only)</b>	Select from list: def F, deg C, R, K
<b>Pressure (steam only)</b>	Fill in the blank (numbers only)
<b>Pressure Unit (steam only)</b>	Select from list: Psia, Psig, KPa, MPa, Bars, Atm

## **Step 6**

### **Energy Use Distribution**

(Note: Questions in this section are not required to be answered.)

The end uses shown in this step depend on the end uses selected in step 2. The following information needs to be entered for each energy stream. Default values are provided.

<b>End Use</b>	<b>Usage or Percent</b> (Same unit that was entered in step 4)
<b>Combined Heat and Power</b>	Fill in the blank (numbers only)
<b>Compressed Air</b>	Fill in the blank (numbers only)
<b>Fans and Blowers</b>	Fill in the blank (numbers only)
<b>Industrial Facilities</b>	Fill in the blank (numbers only)
<b>Materials Handlings</b>	Fill in the blank (numbers only)
<b>Materials Processing</b>	Fill in the blank (numbers only)
<b>Process Cooling</b>	Fill in the blank (numbers only)
<b>Process Heating</b>	Fill in the blank (numbers only)
<b>Pumps</b>	Fill in the blank (numbers only)
<b>Steam Generation</b>	Fill in the blank (numbers only)

(Note: Usage can only be entered as an amount or as a percentage, not both.)

## **Step 7**

### **Energy Savings Opportunities**

(Note: Questions in this section are not required to be answered.)

This step is used to characterize the potential energy savings opportunities for the various major systems in your plant that ePEP does not have scorecards for. Only end uses selected on Step 2 and not listed on Step 3 will show up on this step. For each end use, you are asked to rank the energy saving opportunity level. The end uses that show up on this step are:

<b>Electrochemical Processes</b>	Select from list: High, Medium, Low
<b>Industrial Facilities</b>	Select from list: High, Medium, Low
<b>Fans and Blowers</b>	Select from list: High, Medium, Low
<b>Materials Handlings</b>	Select from list: High, Medium, Low
<b>Materials Processing</b>	Select from list: High, Medium, Low